Viviana Scognamiglio

List of Publications by Year
in descending order

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72 papers	2,946 citations	185998 28 h-index	174990 52 g-index
76 all docs	76 docs citations	76 times ranked	3773 citing authors

#	Article	IF	Citations
1	Nanotechnology in Agriculture: Which Innovation Potential Does It Have?. Frontiers in Environmental Science, 2016, 4, .	1.5	365
2	Nanotechnology in glucose monitoring: Advances and challenges in the last 10 years. Biosensors and Bioelectronics, 2013, 47, 12-25.	5.3	235
3	Carbon black as an outstanding and affordable nanomaterial for electrochemical (bio)sensor design. Biosensors and Bioelectronics, 2020, 156, 112033.	5.3	177
4	Nanomaterials in electrochemical biosensors for pesticide detection: advances and challenges in food analysis. Mikrochimica Acta, 2016, 183, 2063-2083.	2.5	155
5	Biosensing technology for sustainable food safety. TrAC - Trends in Analytical Chemistry, 2014, 62, 1-10.	5.8	142
6	How cutting-edge technologies impact the design of electrochemical (bio)sensors for environmental analysis. A review. Analytica Chimica Acta, 2017, 959, 15-42.	2.6	133
7	Nanostructured (Bio)sensors for smart agriculture. TrAC - Trends in Analytical Chemistry, 2018, 98, 95-103.	5.8	115
8	Biosensors for effective environmental and agrifood protection and commercialization: from research to market. Mikrochimica Acta, 2010, 170, 215-225.	2.5	79
9	Optical biosensors for environmental monitoring based on computational and biotechnological tools for engineering the photosynthetic D1 protein of Chlamydomonas reinhardtii. Biosensors and Bioelectronics, 2009, 25, 294-300.	5.3	68
10	Photosynthesis at the forefront of a sustainable life. Frontiers in Chemistry, 2014, 2, 36.	1.8	65
11	Green nanomaterials fostering agrifood sustainability. TrAC - Trends in Analytical Chemistry, 2020, 125, 115840.	5.8	62
12	Structureâ€based design of novel Chlamydomonas reinhardtii D1â€D2 photosynthetic proteins for herbicide monitoring. Protein Science, 2009, 18, 2139-2151.	3.1	57
13	Structure/Function/Dynamics of Photosystem II Plastoquinone Binding Sites. Current Protein and Peptide Science, 2014, 15, 285-295.	0.7	56
14	Porous silicon-based optical microsensor for the detection of l-glutamine. Biosensors and Bioelectronics, 2006, 21, 1664-1667.	5.3	55
15	Analytical tools monitoring endocrine disrupting chemicals. TrAC - Trends in Analytical Chemistry, 2016, 80, 555-567.	5.8	53
16	Synthetic biology and biomimetic chemistry as converging technologies fostering a new generation of smart biosensors. Biosensors and Bioelectronics, 2015, 74, 1076-1086.	5.3	48
17	Biotechnological Advances in the Design of Algae-Based Biosensors. Trends in Biotechnology, 2020, 38, 334-347.	4.9	46
18	The convergence of forefront technologies in the design of laccase-based biosensors â€“ An update. TrAC - Trends in Analytical Chemistry, 2019, 119, 115615.	5.8	45

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19	An eco-designed paper-based algal biosensor for nanoformulated herbicide optical detection. Journal of Hazardous Materials, 2019, 373, 483-492.	6.5	45
20	New Platform of Biosensors for Prescreening of Pesticide Residues To Support Laboratory Analyses^{â€}. Journal of Agricultural and Food Chemistry, 2010, 58, 5982-5990.	2.4	43
21	Isothermal amplification-assisted diagnostics for COVID-19. Biosensors and Bioelectronics, 2022, 205, 114101.	5.3	40
22	The technology tree in the design of glucose biosensors. TrAC - Trends in Analytical Chemistry, 2019, 120, 115642.	5.8	38
23	Chlamydomonas reinhardtii genetic variants as probes for fluorescence sensing system in detection of pollutants. Analytical and Bioanalytical Chemistry, 2009, 394, 1081-1087.	1.9	36
24	Towards an integrated biosensor array for simultaneous and rapid multi-analysis of endocrine disrupting chemicals. Analytica Chimica Acta, 2012, 751, 161-170.	2.6	36
25	Electrospray deposition as a smart technique for laccase immobilisation on carbon black-nanomodified screen-printed electrodes. Biosensors and Bioelectronics, 2020, 163, 112299.	5.3	35
26	Binding of glutamine to glutamine-binding protein from Escherichia coli induces changes in protein structure and increases protein stability. Proteins: Structure, Function and Bioinformatics, 2004, 58, 80-87.	1.5	30
27	Carbon black nanoparticles to sense algae oxygen evolution for herbicides detection: Atrazine as a case study. Biosensors and Bioelectronics, 2020, 159, 112203.	5.3	30
28	The role of calcium in the conformational dynamics and thermal stability of the D-galactose/D-glucose-binding protein from Escherichia coli. Proteins: Structure, Function and Bioinformatics, 2005, 61, 184-195.	1.5	29
29	Unfolding and Refolding of the Glutamine-Binding Protein fromEscherichia coliand Its Complex with Glutamine Induced by Guanidine Hydrochlorideâ€. Biochemistry, 2005, 44, 5625-5633.	1.2	27
30	Rapid and label-free detection of ochratoxin A and aflatoxin B1 using an optical portable instrument. Talanta, 2016, 150, 440-448.	2.9	26
31	Binding of Glucose to the d-Galactose/d-Glucoseâ€“Binding Protein from Escherichia coli Restores the Native Protein Secondary Structure and Thermostability That Are Lost upon Calcium Depletion. Journal of Biochemistry, 2006, 139, 213-221.	0.9	25
32	Automatable Flow System for Paraoxon Detection with an Embedded Screen-Printed Electrode Tailored with Butyrylcholinesterase and Prussian Blue Nanoparticles. Chemosensors, 2015, 3, 129-145.	1.8	25
33	Paper-Based Electrochemical Devices in Biomedical Field. Comprehensive Analytical Chemistry, 2017, 77, 385-413.	0.7	25
34	Sustainable materials for the design of forefront printed (bio)sensors applied in agrifood sector. TrAC - Trends in Analytical Chemistry, 2020, 128, 115909.	5.8	25
35	Reusable optical multi-plate sensing system for pesticide detection by using electrospun membranes as smart support for acetylcholinesterase immobilisation. Materials Science and Engineering C, 2020, 111, 110744.	3.8	24
36	Protein-Based Biosensors for Diabetic Patients. Journal of Fluorescence, 2004, 14, 491-498.	1.3	23

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37	A new embedded biosensor platform based on micro-electrodes array (MEA) technology. Sensors and Actuators B: Chemical, 2013, 176, 275-283.	4.0	23
38	What makes nanotechnologies applied to agriculture green?. Nano Today, 2022, 43, 101389.	6.2	23
39	D-galactose/D-glucose-binding Protein from Escherichia coli as Probe for a Non-consuming Glucose Implantable Fluorescence Biosensor. Sensors, 2007, 7, 2484-2491.	2.1	21
40	Emerging technologies in the design of peptide nucleic acids (PNAs) based biosensors. TrAC - Trends in Analytical Chemistry, 2020, 132, 116062.	5.8	19
41	Paper-Based Electrochemical Devices for the Pharmaceutical Field: State of the Art and Perspectives. Frontiers in Bioengineering and Biotechnology, 2020, 8, 339.	2.0	19
42	The plastoquinolâ€“plastoquinone exchange mechanism in photosystem II: insight from molecular dynamics simulations. Photosynthesis Research, 2017, 131, 15-30.	1.6	18
43	A dual electro-optical biosensor based on Chlamydomonas reinhardtii immobilised on paper-based nanomodified screen-printed electrodes for herbicide monitoring. Journal of Nanobiotechnology, 2021, 19, 145.	4.2	18
44	Photosynthesis-based hybrid nanostructures: Electrochemical sensors and photovoltaic cells as case studies. TrAC - Trends in Analytical Chemistry, 2019, 115, 100-109.	5.8	17
45	Nanomaterial-based sensors. , 2020, , 329-359.		17
46	A Strategic Fluorescence Labeling ofd-Galactose/d-Glucose-Binding Protein fromEscherichiacoliHelps to Shed Light on the Protein Structural Stability and Dynamics. Journal of Proteome Research, 2007, 6, 4119-4126.	1.8	16
47	Fluorescence Properties of Glutamine-Binding Protein fromEscherichia coliand Its Complex with Glutamine. Journal of Proteome Research, 2005, 4, 417-423.	1.8	15
48	A Thermostable Sugar-Binding Protein from the Archaeon Pyrococcus horikoshii as a Probe for the Development of a Stable Fluorescence Biosensor for Diabetic Patients. Biotechnology Progress, 2004, 20, 1572-1577.	1.3	14
49	The Odorant-Binding Protein from Canis familiaris: Purification, Characterization and New Perspectives in Biohazard Assessment. Protein and Peptide Letters, 2006, 13, 349-352.	0.4	14
50	A whole cell optical bioassay for the detection of chemical warfare mustard agent simulants. Sensors and Actuators B: Chemical, 2018, 257, 658-665.	4.0	14
51	Photoautotrophsâ€“Bacteria Co-Cultures: Advances, Challenges and Applications. Materials, 2021, 14, 3027.	1.3	14
52	Glutamine-Binding Protein fromEscherichiaColiSpecifically Binds a Wheat Gliadin Peptide. 2. Resonance Energy Transfer Studies Suggest a New Sensing Approach for an Easy Detection of Wheat Gliadin. Journal of Proteome Research, 2006, 5, 2083-2086.	1.8	13
53	A Choline Oxidase Amperometric Bioassay for the Detection of Mustard Agents Based on Screen-Printed Electrodes Modified with Prussian Blue Nanoparticles. Sensors, 2015, 15, 4353-4367.	2.1	13
54	Design and biophysical characterization of atrazine-sensing peptides mimicking the Chlamydomonas reinhardtii plastoquinone binding niche. Physical Chemistry Chemical Physics, 2013, 15, 13108.	1.3	12

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55	Commercially Available (Bio)sensors in the Agrifood Sector. Comprehensive Analytical Chemistry, 2016, 74, 315-340.	0.7	12
56	Organophosphorous Pesticide Detection in Olive Oil by Using a Miniaturized, Easy-to-Use, and Cost-Effective Biosensor Combined with QuEChERS for Sample Clean-Up. Sensors, 2017, 17, 34.	2.1	12
57	Multi-potential biomarkers for seafood quality assessment: Global wide implication for human health monitoring. TrAC - Trends in Analytical Chemistry, 2020, 132, 116056.	5.8	11
58	High-Tech and Nature-Made Nanocomposites and Their Applications in the Field of Sensors and Biosensors for Gas Detection. Biosensors, 2020, 10, 176.	2.3	11
59	State of the Art on the SARS-CoV-2 Toolkit for Antigen Detection: One Year Later. Biosensors, 2021, 11, 310.	2.3	11
60	A Recombinant Glutamine-Binding Protein from Escherichia coli: Effect of Ligand-Binding on Protein Conformational Dynamics. Biotechnology Progress, 2004, 20, 1847-1854.	1.3	9
61	Treated Gold Screen-Printed Electrode as Disposable Platform for Label-Free Immunosensing of Salmonella Typhimurium. Electrocatalysis, 2019, 10, 288-294.	1.5	8
62	Next-generation diagnostics: Augmented sensitivity in amplification-powered biosensing. TrAC - Trends in Analytical Chemistry, 2022, 148, 116538.	5.8	8
63	Computational Biology, Protein Engineering, and Biosensor Technology: a Close Cooperation for Herbicides Monitoring. , 2011, , .		6
64	Novel atrazine-binding biomimetics inspired to the D1 protein from the photosystem II of Chlamydomonas reinhardtii. International Journal of Biological Macromolecules, 2020, 163, 817-823.	3.6	6
65	Nanobiosensors for Bioclinical Applications: Pros and Cons. Nanotechnology in the Life Sciences, 2020, , 117-149.	0.4	6
66	Electrochemical Biosensors for Chemical Warfare Agents. Advanced Sciences and Technologies for Security Applications, 2016, , 115-139.	0.4	6
67	Efforts, Challenges, and Future Perspectives of Graphene-Based (Bio)sensors for Biomedical Applications. , 2018, , 133-150.		5
68	A Proof-of-Concept Electrochemical Cytosensor Based on Chlamydomonas reinhardtii Functionalized Carbon Black Screen-Printed Electrodes: Detection of Escherichia coli in Wastewater as a Case Study. Biosensors, 2022, 12, 401.	2.3	4
69	Odor binding protein as probe for a refractive index-based biosensor: new perspectives in biohazard assessment. , 2004, 5321, 258.		3
70	Enhancing resistance of Chlamydomonas reinhardtii to oxidative stress fusing constructs of heterologous antioxidant peptides into D1 protein. Algal Research, 2021, 54, 102184.	2.4	2
71	Photosynthesis-based biosensors for environmental analysis of herbicides. Case Studies in Chemical and Environmental Engineering, 2021, , 100157.	2.9	2
72	Quantum dots functionalised artificial peptides bioinspired to the D1 protein from the Photosystem II of Chlamydomonas reinhardtii for endocrine disruptor optosensing. Talanta, 2021, 224, 121854.	2.9	1